

Integrated Work Management - Interim Process

Los Alamos National Laboratory

Effective Date: May 1, 2004

Mandatory Document

NOTICE

Health, Safety & Radiation Protection Division	April 27, 2004	Notice 0142
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Integrated Work Management – Interim Process

This Notice replaces Notice 131 and the requirements/guidance contained herein are to be implemented beginning May 1, 2004. Notice 131 was originally issued 11/3/03 requiring improvements that are to be implemented until they are incorporated into revisions to the Laboratory's work control/management LIRs. Also see Director's Instruction, [DI04-004](#), dated April 26, 2004 for additional specific revisions and further guidance.

INTRODUCTION

To enhance the Laboratory's work management processes for safely conducting work, an Integrated Work Management Committee (IWMC) was appointed by the Director to develop improvements in Safe Work Practices (SWP), Hazard Analysis and Control for Facility Work, and other requirements that support them. The IWMC has been conducting the initiative for piloting, and implementing a comprehensive set of work control improvements.

This revised Notice is being issued in response to lessons learned and feedback from various organizations on concerns with implementation of the process. The revisions herein clarify the intent of the original Notice on when an IWD is required, provides additional implementation guidance, and establishes process improvement for executing IWM for repetitive, low hazard, crosscutting activities.

Specifically, the requirements contained in this Notice emphasize the implementation of the existing work control processes. Thus, changes to existing work processes are not being required at this time. Instead, the requirements contained in this Notice refine implementation expectations, clarify roles and responsibilities, and provide a tool to drive work process improvements. In short, this is an overlay of the existing work control processes.

Note: The Integrated Work Document (IWD) supercedes the following specific requirements, provided the original intent of the requirements are being implemented:

1. AHAs for Facility Work
2. Identification of Activities, Hazard Analysis, and Controls for Safe Work Practices

3. Pre-job Briefs in Facility Work Control
4. Pre-job Briefs in Radiation Work Permits
5. Form 1692 (attached) replaces the previous Form 1692.

The requirements contained in this Notice shall apply to all work requiring Hazard Control Plans (HCPs), Activity Hazards Analyses (AHA), and other activity hazard identification/control documents.

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1.0 DEFINITIONS

Activity: A set of tasks required to meet project deliverables.

Task: A subset of an Activity comprised of procedural steps.

Step: A segment of a task, typically sequenced into a procedure or work instruction, necessary to advance the work.

2.0 REQUIREMENTS FOR IMPLEMENTATION

The following requirements must be implemented for all work management processes:

1. Development of a consolidated set of clearly defined work tasks/steps linked to hazards and controls. Tasks/steps shall be identified in sufficient detail to ensure that the work can be accomplished with all hazards and controls identified.
2. Consolidation of a set of clearly defined work tasks/steps linked to the hazards and controls that provide a single Integrated Work Document (IWD) that:
 - Are directed at the worker,
 - Identify work tasks/steps in a structured manner
 - Are extracted from other documents and/or developed into an integrated set of tasks/steps, hazards and controls.
3. Identification of a **single** Person-In-Charge (PIC) with the responsibility, accountability, and authority to determine the quality of the completed IWD and manage and coordinate the work to the IWD to include ensuring coordination of all workers and other aspects of the activity.
4. Involvement of the Responsible Division Leader (RDL) or his/her formally designated representative who must approve and authorize all work within the RDL's facility.
5. Direct involvement, as necessary, of workers, supervisors, subject matter experts (SMEs), the PIC, and the facility management point of contact (FM POC) in identifying tasks/steps and associated hazards and controls.
6. A field walk-down of the work activity to validate the tasks/steps, hazards, and controls that have been identified for implementation.
7. Clearly identified roles and responsibilities, accountabilities and authorities required for work management review and approval.
8. Explicit release of the work prior to startup, and continued confirmation of readiness periodically performed for conducting the work.

3.0 INTERIM PROCESS

The Integrated Work Management Interim Process comprises 6 critical steps. The Integrated Work Document (IWD) Form 2067 shall be used to implement and document this process which includes:

1. Preparation of the IWD by identifying work activities, tasks/steps, and corresponding hazards and controls.
2. Validation of the IWD tasks/steps, hazards, and controls through a field walk-down.
3. Approval of the work activity.
4. Pre-job briefing based on the IWD tasks/steps, hazards, and controls.
5. Release of the work.
6. Periodic confirmation of readiness.

4.0 IDENTIFYING WORK ACTIVITIES

IWD(s) are generally not required for:

- Activities involving hazards associated with “everyday living” such as driving automobiles and ordinary lifting;
- General office work;
- Field activities that do not require hands on work (e.g. visual inspections, log taking, etc.)
- Other non-complex, very low hazard work as determined by the safety responsible line manager.

The above activities are subject to facility specific requirements, and may require an IWD if additional site-specific hazards are present.

IWD(s) are required for all other work.

Specific examples of when an IWD is required are:

- Involves a combination of crafts or multiple workers requiring significant sequencing, coordination, integration, or verification of their respective tasks to complete the work;
- Involves known significant work exposure to hazards that could result in serious injury
- Is non-routine, infrequently performed (less than once per year), or has never been performed and is suspected to introduce hazards that could result in serious injury,

- Involves entering environments where hazards have not been evaluated;
- Involves a substantial potential for chemical or radiological exposure or release
- Involves multiple hazards requiring possible conflicts and coordination of controls

The interim process shall apply to all current and future work activities requiring HCPs, AHAs, and other activity hazard identification/control documents. IWD(s) shall be produced for these activities. There may be circumstances where HCPs or other work control documents did not exist in the past where an IWD is required.

Laboratory organizations must identify existing work management documents, evaluate how thoroughly they currently meet the expectations contained in this Notice, and resolve identified deficiencies while developing the IWDs.

For new work, existing work control processes must be applied in accordance with existing requirements including SWP and Hazard Analysis for Facility Management Work Control, and respective work control documents must be produced.

Guidance Note: The IWD can serve as the requisite task/step, hazard, and control descriptions for these documents (e.g. the IWD can serve as the AHA for facility management work control or the hazards analysis and control section for the HCP).

Emergency work covered in the Facility Management Work Control LIR 230-03-01.5 shall be outside the scope of this Notice as well as emergency response and other Emergency Management & Response (EM&R) and PTLA support. Operations organizations and facilities must continue to implement existing processes and requirements for these work activities.

5.0 REQUIREMENTS FOR BREAKING DOWN ACTIVITIES INTO TASKS/STEPS

After identifying the work activity, the first step in completing the IWD shall be the breaking down of the activity into its component task/steps and entering these in the IWD Part B. The Preparer shall perform this, with input as necessary, from representative workers, subject-matter-experts, and the FM POC.

Guidance Note: It is strongly advised that workers be involved in preparing the IWD to ensure details are correctly identified.

Guidance Note: In many cases, a scoping walk-down of the activity work site may be warranted.

Activities must be systematically broken down into a detailed level that ensures identification of unique hazards, concerns, and potential accidents and must establish effective controls, preventive measures, and boundary conditions as they relate to specific tasks/steps. Task/steps shall be presented sequentially when such sequencing contributes to the safety of the activity.

For the purpose of this Notice, activities are made up of tasks, and tasks are made up of steps. Ordinarily, work should be broken down into individual steps. Care must be taken not to make the steps too general, thereby missing specific steps and their associated hazards.

Guidance Note: When additional detail is required on how the work is to be performed, detailed work instructions may be referenced on the IWD Part B. The referenced material must include the detailed step requirements, the hazards and controls are broken out at the task/step level, and the referenced material included with the work package. Each step should begin with action words like "remove", "carry", or "open", and describe what the action applies to.

For some work activities, the hazards and controls may be adequately identified and managed at the task level without requiring detailed steps. In this case, the line manager must designate in writing that the task can be performed safely by a worker, based upon the worker's expertise and qualifications. For craft workers, journeyman trade status must be utilized to demonstrate expertise and qualification for defined skill of craft tasks. For technical personnel, individual qualifications must be evaluated, documented, and approved by the line manager.

Guidance Note: An example form of how this documentation can be completed is available at <http://int.lanl.gov/safety/iwmc/>.

For work activities where current management documents do not contain the required detail, additional required detail must be added to the IWD. More than one IWD may be required for an activity or several activities that are currently covered by a single work control document. For work activities where tasks/steps for a single activity currently exist in multiple hazard identification documents (e.g., work permits, HCPs, work packages, etc.), these shall be consolidated into a single IWD.

6.0 REQUIREMENTS FOR IDENTIFYING HAZARDS, CONCERNS, AND POTENTIAL ACCIDENTS

After recording the basic tasks/steps, all activity and site hazards, concerns, and potential accidents associated with relevant tasks/steps must be identified. In cases where hazards for a single activity currently exist in multiple hazard identification documents (e.g., work permits, RWPs, HCPs, etc.), these shall be consolidated into a single IWD and documented in Part B of Form 2067.

Guidance Note: To assist in identifying potential hazards, a hazard checklist or other tool should be used. An example of a hazard and control identification tools is included at <http://int.lanl.gov/safety/iwmc/>.

As necessary, SMEs shall be utilized to assist in identifying hazards, concerns, and potential accidents.

7.0 REQUIREMENTS FOR DETERMINING CONTROLS, PREVENTIVE MEASURES AND BOUNDARIES

Controls, preventive measures, boundary conditions, supplemental documents, and training requirements shall be developed or identified for each hazard, concern, and potential accident then documented in Part B of the IWD. In cases where other permits or work documents identify controls, those controls shall be included in the IWD Part B. The order of preference for the type of control implemented shall be:

1. Elimination of the hazard by choosing or modifying the process or substituting a less hazardous substance, or modifying the equipment or tools
2. Application of engineering controls such as enclosures, machine guards, interlocks, worker booths or similar devices
3. Application of administrative controls, such as training, lockout/tagout, and procedure development or modification
4. Use of personal protective equipment (PPE)

As necessary, SMEs shall be utilized to assist in identifying hazards, controls, preventive measures, and boundaries. Controls shall be specific in nature (e.g. “goggles and face shield” rather than “eye protection”). A final check must be completed to ensure that the controls in aggregate are correct and implementable, but do not introduce an additional unevaluated hazard.

8.0 USE OF PROCEDURES, HAZARD CONTROL PLANS, EXPERIMENTAL PLANS, AND OTHER DOCUMENTS

Separate procedures, hazard controls plans, experimental plans or other documents may be referenced in the IWD and used to provide more detailed work direction and discussion of hazards and controls. In such cases, key hazards and controls shall be extracted from the referenced documents and consolidated as a summary in the IWD. In such cases, the package of hazard control information, including the IWD and any referenced documents must meet the Integrated Work Management Process objectives of being user friendly, of not burying hazards and controls among extraneous information, of being easily reviewable, and being explicit in identifying hazards and controls.

9.0 REQUIREMENTS FOR VALIDATING THE TASKS/STEPS, HAZARDS AND CONTROLS

After the tasks/steps, hazards, and controls for an activity have been identified, representative workers and the PIC shall validate them through a field walk-down. As necessary, this validation walk-down shall also involve direct supervisors, subject matter experts, the FM point-of-contact, and others. The walk-down shall use the IWD to review tasks/steps for “workability”, and the hazards and controls for completeness and adequacy. The walk-down shall be performed as close in time to the actual start of the work as feasible. Following validation of the IWD, any issues identified shall be resolved before the work is released.

10.0 REQUIREMENTS FOR APPROVING ACTIVITY

The RDL for the facility where work is performed shall be responsible for the safety of the work and for coordination of the work to manage aggregate and co-located hazards in the facility. Only the RDL may designate representative(s) who shall approve the work based upon confidence that this work management process has been effectively implemented and that the work will proceed safely within the facility. As necessary, the RDL shall also establish mechanisms, such as access controls or Plan of the Week meetings for ensuring coordination of work in the facility to manage aggregate/co-located hazards.

For low hazard, repetitive activities performed in multiple facilities or locations, the Division Leader responsible for the activity shall review and approve the Crosscutting IWD, (e.g. Security DL for PTLA, FWO DL for KSL, CCN for Qwest, RRES, HSR, and FWO for their own Divisions). The RDL for the facility must complete Form 1692 “RDL Requirements for Entry and Performing Work in a Facility”, to notify individuals of the requirements or conditions for entry into the facility (e.g. Plan of the Day/Week, site specific training, escort, etc.) and to document the site hazards and the controls required for personnel protection.

11.0 REQUIREMENTS FOR CONDUCTING A PRE-JOB BRIEFING

Immediately prior to starting the work activity, the PIC shall conduct a pre-job brief. Conduct of the brief must involve participation in or leading of the discussion. This briefing must involve the PIC and the actual workers performing the task/steps covered by the IWD, and, as necessary, direct supervisors, subject matter experts and the FM POC. The pre-job briefing should be completed at the worksite where practical and shall include a job site walk-down, except in cases where the pre-job walk-down will introduce unreasonable risk. The IWD shall be discussed to ensure that everyone involved understands and agrees with the task/steps, hazards, and controls. The briefing shall include a discussion of stop work responsibilities and safe shutdown measures. Workers must confirm that they are qualified and fit to perform the work and that work is ready to start.

12.0 REQUIREMENTS FOR RELEASING THE WORK

In those cases where the activity may have an impact on the facility or may interface with facility systems, structures, or components, the FM POC shall concur with the release of the work. The PIC shall confirm that the work and workers are authorized, that required initial conditions and other prerequisites are in-place, and that he/she has conducted the pre-job briefing with all workers. The PIC shall release the work for start-up after being satisfied that all of the work planning and preparation requirements have been implemented.

13.0 REQUIREMENTS FOR PERIODICALLY CONFIRMING READINESS

After the initial start-up of a work activity, periodic post-start readiness checks shall be performed to confirm that working conditions remain within planned parameters. At the start of the work day, the beginning of a new shift, or other identified time, the workers and PIC shall determine if any significant changes in the work or workers have occurred requires reevaluation of the work, hazard, or controls. This review shall serve as the daily worker “self-readiness check” required by Safe Work Practices. Changes which must be considered include:

- new workers
- change in the scope of work
- identification of a new hazard
- changes in status of controls
- changes in facility, equipment, or work conditions
- additional concerns by workers or others

The PIC shall evaluate the significance of the change and determine the correct response, which could include re-working the IWD, conducting another pre-job briefing and work release, or simply making editorial field changes to the documentation. Field changes cannot result in increases of scope beyond that which was originally approved in the source work control document. In cases where change is indicated, the PIC shall notify all affected workers, the RDL as appropriate, and determine the need for formal change or field change to the IWD.

14.0 ROLES AND RESPONSIBILITIES

Roles, responsibilities, and authorities for the integrated work management - interim process shall be those depicted in the table below. In some cases, a single individual may fulfill multiple roles, but a minimum of two people are always required to complete the process.

WHO	MUST
<p><u>Preparer</u>: The individual designated by their respective line management who prepares Part B of the IWD Form 2067. This person shall have the knowledge of the work activity that is required for defining the tasks/steps, hazards, and controls, and involve other personnel, as necessary.</p>	<ul style="list-style-type: none">• As necessary, engage actual or representative workers, SME(s), facility personnel, and others when defining tasks/steps in the detail required to ensure complete identification of the associated hazards, determination of the required controls, and the effective completion of the work activity.• When existing work control work documents are referenced, ensure new task/steps, hazards, and controls identified during preparation and validation of this process are incorporated back into the source documents.• Define conditions and parameters for the work that must not be exceeded in order to avoid off- normal occurrences, as appropriate.

WHO	MUST
<p><u>Workers</u>: Individuals who will be directly involved in the actual performance of the work activity.</p>	<ul style="list-style-type: none"> • Provide input regarding their direct knowledge of work steps, identification of hazards, potential accident scenarios, and effectiveness of controls in the IWD preparation. Participate in the IWD validation, pre-job briefings, and on-going readiness checks to confirm that: <ul style="list-style-type: none"> ▪ <i>Tasks/steps</i> have been identified in the detail required to ensure all hazards and concerns are identified, ▪ The work activity can be performed as written, ▪ They are <i>confident</i> that the hazards have been identified, ▪ They are <i>comfortable</i> that the controls will prevent accidents, ▪ The validation walk-down and pre-job briefings are effective, and ▪ They are qualified and fit to perform the work safely. • Perform work and apply controls in accordance with the requirements contained in the IWD. • Stop work when conditions or hazards change or when encountering unexpected conditions during the execution of the work. <p><u>Guidance Note</u>: A representative worker may participate in the preparation and validation steps when the actual workers have not been identified. This representative worker has all of the responsibilities of a worker, as detailed above.</p>

WHO	MUST
<p><u>Subject Matter Expert (SME)</u>: An individual with recognized academic credentials, work experience, or knowledge of an ES&H field or other functional area associated with the defined work.</p>	<ul style="list-style-type: none"> • Provide specific technical expertise for identification of tasks/steps, hazards, and/or controls during the development of the IWD. • Participate in the IWD validation walk-down, and pre-job briefing as necessary. • Identify conditions and parameters for which work should be stopped to prevent accidents.
<p><u>Facility Manager Point of Contact (FM POC)</u>: a facility subject matter expert.</p>	<ul style="list-style-type: none"> • Provide specific facility-related information regarding facility systems, structures, and components and facility-related processes during development of the IWD. • Participate in the IWD validation walk-down and work release as necessary.
<p><u>Responsible Division Leader (RDL)</u>: the division leader having ultimate responsibility, authority, and accountability for the safety of all work activities within his/her facility.</p>	<ul style="list-style-type: none"> • Consider all of the facility requirements and conditions, work processes, aggregate hazards, authorization basis, and the interrelationship between proposed work and other ongoing work activities and site hazards. • Approve all work in the facility prior to startup based upon confidence that the work will be performed safely. <u>Only</u> the RDL shall delegate his/her authority for work approval of defined operations, in writing, preferably to representatives within his/her line organization. • When such authorities are delegated, the delegation shall include formal agreement between the RDL, the representative, and the division leader responsible for that representative. This delegation shall also specify limits or boundaries within which the delegation is valid. • Establish conditions, parameters and/ or date when RDL re-approval is required.

WHO	MUST
<p><u>Direct Supervisor</u>: The first level above the worker(s) in the safety responsible line management chain.</p>	<ul style="list-style-type: none"> As necessary, participate in the IWD development, validation walk-down, and pre-job briefing to assist in confirming that tasks/steps, hazards, and controls are correctly identified. Confirm that workers assigned to the work activity are qualified and authorized to perform that activity. <p><u>Guidance Note:</u> In accordance with ISM, this position can be formally transferred, in writing, from one organization to another.</p>
<p><u>Person-In-Charge (PIC)</u>: the individual with responsibility, authority, and accountability for coordinating and executing the work activity in accordance with the IWD. The PIC must be a LANL UC or prime subcontractor employee except for construction activities. He/she must be assigned by the line manager responsible for the work and approved in writing by the RDL (indicated by RDL's signature on the IWD)</p>	<ul style="list-style-type: none"> Conduct the validation walk-down, and confirm that: <ul style="list-style-type: none"> necessary Subject Matter Experts (SMEs) were <i>involved</i> in this process, <i>tasks/steps</i> have been identified in the detail required to ensure all hazards and concerns are identified, the work activity can be performed as written, workers are <i>confident</i> that the hazards have been identified, workers are <i>comfortable</i> that the controls will prevent accidents, Release and re-release work and confirm that: <ul style="list-style-type: none"> workers are authorized to perform the work the validation walk-down and pre-job briefings are effective, and the IWD is complete and the work meets all conditions for start-up and release.

WHO	MUST
	<ul style="list-style-type: none"> • Stop work when conditions or hazards change or when unexpected conditions are encountered during the execution of the work. • Resolve conflicts in tasks/steps, hazards and controls. • Resolve on-the-floor issues as they arise utilizing a graded approach consistent with the requirements in this Notice.

15.0 REPETITIVE, LOW HAZARD ACTIVITIES CROSSCUTTING MULTIPLE FACILITIES AND LOCATIONS

A Crosscutting IWD shall only be used for a repetitive, non-complex, low hazard activity that is performed in multiple facilities/locations (e.g., material delivery, simple preventative and corrective maintenance). Specific criteria under which a Crosscutting IWD cannot be developed are provided in Attachment B. The division leader (or designee) responsible for the work activity must approve Crosscutting IWDs for their division and establish a list of these for posting on the IWM Web Site. (See flowchart in Attachment C).

For Crosscutting IWDs the division leader (or designee) responsible for the work activity shall approve the IWD in the space on Part A for the RDL signature. For example, the FWO Division Leader must sign as the approver for an FWO/KSL work activity performed using a Crosscutting IWD. The RDL for the facility where the work will be performed must establish facility coordination and site-specific requirements/controls using the modified Form 1692.

A Crosscutting IWD shall address only activity hazards and controls inherent in the work activity itself. Site specific hazards and controls, along with scheduling and coordination of the work at the facility, must be addressed using a Form 1692.

Form 1692 identifies requirements that shall be implemented for interfacing with the RDL and other facility personnel, such as those for site check-in, participation in a Plan of the Day/ Week, access controls, or other facility scheduling/coordination requirements. Form 1692 shall be used to identify, document, and communicate site specific hazards and controls. The combination of the Crosscutting IWD and Site Hazards and Coordination Form, shall be required to establish both activity and site specific hazards and controls, while identifying interface requirements between the work provider and the RDL. The RDL, or designee, who has responsibility for coordination of work throughout a facility and for managing a facility's aggregate and co-located hazards shall approve and sign Form 1692.

For Crosscutting IWDs, the validation walk down shall be performed at least once on a system or equipment that is representative of the work described. Prior to work release, walk downs must be performed on the actual system or equipment

16.0 IMPLEMENTATION SCHEDULE

The requirements contained in this Notice shall be effective on May 1, 2004. The requirements contained in this Notice shall remain in effect until incorporated into the work control LIRs. The OIC for this Notice is the HSR Division office.

Integrated Work Management – Interim Process

Los Alamos National Laboratory

Effective Date: May 1, 2004

Mandatory Document

INTEGRATED WORK DOCUMENT (IWD)

PART A

Work Document #: (HCP, WO, etc.)		Activity/Task Title:		
FMU:	TA:	Building:	Room:	Expiration Date:
Activity/Task Description:				
PREPARATION				
The signature(s) below signifies that Part B work steps/tasks, hazards and controls are of sufficient detail to safely perform the work.				
Preparer (Signature / Z # / Date) Required		SME (Signature / Z # / Date / Area of Expertise)		
SME (Signature / Z # / Date / Area of Expertise)		SME (Signature / Z # / Date / Area of Expertise)		
SME (Signature / Z # / Date / Area of Expertise)		FM POC (Signature / Z # / Date)		
VALIDATION				
The signature(s) below signifies that a pre-start validation of the IWD has been completed utilizing an activity walk-down, and confirms the following:				
<ol style="list-style-type: none">1. The necessary Subject Matters Expert(s) (SME) were involved in this process.2. Steps/tasks have been identified in sufficient detail.3. The work can be performed as written.4. I am confident that the hazards have been identified.5. I am comfortable that the controls are sufficient to perform the work safely.				
Worker (Signature / Z # / Date / Area of Expertise) Required		Worker (Signature / Z # / Date / Area of Expertise)		
Worker (Signature / Z # / Date / Area of Expertise)		Worker (Signature / Z # / Date / Area of Expertise)		
FM POC (Signature / Z # / Date)		PIC (Signature / Z # / Date) Required		

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INTEGRATED WORK DOCUMENT (IWD)

APPROVAL	
The RDL approves the work in his/her facility prior to startup based on confidence that the work will be completed safely, following completion of pre-job briefing and work release.	RDL or Representative (Signature / Z # / Date) Required
Condition or date when RDL re-approval is required.	
PRE-JOB BRIEFING	
By signing below, I agree to the following: <ul style="list-style-type: none">▪ I agree to follow the work steps and implement the controls as written.▪ I agree to stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.▪ I am qualified and fit to perform the work. <i>Note: Supplemental signature sheets may be added as necessary.</i>	
Worker (Signature / Z # / Date) Required	Worker (Signature / Z # / Date)
Worker (Signature / Z # / Date)	Worker (Signature / Z # / Date)
Worker (Signature / Z # / Date)	Worker (Signature / Z # / Date)
Worker (Signature / Z # / Date)	Worker (Signature / Z # / Date)
WORK RELEASE	
By signing below, I have verified that the facility conditions are compatible with the work activity.	
FM POC (Signature / Z # / Date)	
By signing below, I have verified the following: <ul style="list-style-type: none">▪ The assigned workers have the authorization and training to perform the work safely.▪ The IWD is adequate, and the worksite meets all conditions for startup and release.▪ I have conducted the pre-job briefing, all workers have been briefed and, as necessary a pre-job walk-down has been completed.	
PIC (Signature / Z # / Date) Required	

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INTEGRATED WORK DOCUMENT (IWD)

PRE-JOB BRIEFING, CONTINUATION SHEET

By signing below, I agree to the following:

- I agree to follow the work steps and implement the controls as written.
- I agree to stop work when conditions or hazards change or when I encounter unexpected conditions during the execution of work, or when work cannot be performed as written, or instructions become unclear during execution.
- I am qualified and fit to perform the work.

Worker (Signature / Z # / Date) **Required**

Worker (Signature / Z # / Date)

Worker (Signature / Z # / Date)

Worker (Signature / Z # / Date)

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Worker (Signature / Z # / Date)

WORK RE-RELEASE

By signing below, I have verified that the facility conditions are compatible with the work activity.

FM POC (Signature / Z # / Date)

By signing below, I have verified the following:

- The assigned workers have the authorization and training to perform the work safely.
- The IWD is adequate, and the worksite meets all conditions for startup and release.
- I have conducted the pre-job briefing, all workers have been briefed and, as necessary, a pre-job walk-down has been completed.

PIC (Signature / Z # / Date) **Required**

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INTEGRATED WORK DOCUMENT (IWD)

PART B

Work Tasks/Steps Identify sequence of work steps/tasks.	Hazards, Concerns, and Potential Accidents Identify hazards for each task/step. Identify site hazards that could affect workers.	Controls, Preventive Measures, and Boundaries Specify controls for each hazard (e.g., lockout/tagout points, specific PPE, etc.).	Supplemental Documents List permits, operating manuals, and other reference procedures.	Training List training requirements.

RDL Requirements for Entry and Performing Work in a Facility
 Los Alamos National Laboratory
 Integrated Work Management
 Effective Date: May 1, 2004



This document replaces the previous version of Form 1692 "ESH Site Hazard and Control Form" and must be completed for Crosscutting IWDs and all Facility Work. An assigned point of contact designated by the RDL must be responsible for the determination of the entry and coordination requirements and the identification of ES&H site hazards and the associated ES&H Security controls specific to this work request and location.

WR No./IWD No.	FMU	TA	Bldg.	Room	Other Location
Entry and Coordination Requirements (Check one or more of the following)					
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> No entry/coordination requirements</div> <div style="width: 33%;"><input type="checkbox"/> POTD/POTW</div> <div style="width: 33%;"><input type="checkbox"/> Security Clearance Requirements</div> <div style="width: 33%;">Check-in <input type="checkbox"/> At Start of Work</div> <div style="width: 33%;"><input type="checkbox"/> Escort</div> <div style="width: 33%;"><input type="checkbox"/> Other Security Requirements</div> <div style="width: 33%;"><input type="checkbox"/> Work must be scheduled</div> <div style="width: 33%;"><input type="checkbox"/> Daily</div> <div style="width: 33%;"><input type="checkbox"/> Quality Issues</div> <div style="width: 33%;"><input type="checkbox"/> Co-located Hazards/Concerns</div> <div style="width: 33%;"><input type="checkbox"/> Other Bounding Conditions _____</div> <div style="width: 33%;"><input type="checkbox"/> Review under AB/Safety Basis/USQ</div> <div style="width: 33%;"><input type="checkbox"/> Site Training</div> </div>					
RDL Assigned point of contact Name/Signature _____ Z No. _____ Date _____ Phone Number _____ <p>Note: The PIC must ensure that the site hazards and the activity hazards identified on this form included on the Crosscutting IWD are integrated and de-conflicted and that entry and coordination requirements are met. For other than Crosscutting IWDs, the site hazards, controls, training, and entry and coordination requirements must be incorporated into the IWD.</p> Name of RDL or designee who will approve the work _____ Phone Number: _____ RDL Name/Signature _____ Z No. _____ Date _____ Approval of work under this form is valid through: Date _____					

Instructions: Identify site hazards and concerns that could potentially affect the worker(s). Specify the facility controls and preventive measures that must be implemented by the worker(s) to protect against the site hazards as well as any special training required.

ES&H SITE HAZARDS & CONTROLS				
Site Hazards/ Concerns Identify site hazards and concerns that could potentially affect the worker(s).	Site Hazard Present	Facility Controls/Preventive Measures/Boundaries Specify controls for each site hazard	Supplemental Documents List permits, operating manuals, and other reference procedures	Special Training List training requirements
<input type="checkbox"/> No Site Hazards				
Ionizing Radiation Work in posted radiological areas, work with radioactive materials, or work on or near radiation producing devices. <u>Specify Hazard:</u> _____	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Worker Exposure Working near non-ionizing radiation, beryllium, noise, chemicals, hazardous biological materials, lead, asbestos, temperature/humidity extremes, or high explosives. <u>Specify Hazard:</u> _____	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Energized and Operative Systems Working near energized electrical parts, pressure systems, steamlines, unlisted or unapproved electrical equipment; near unprotected belts, pulleys, chains or rotating equipment; fuel fired equipment other than vehicles; or spark or flame producing operations. <u>Specify Hazard:</u> _____	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Confined Spaces Entry into tanks, manholes, cooling towers, sumps, or any other area with potentially low oxygen concentration. <u>Specify Hazard:</u> _____	<input type="checkbox"/> Yes <input type="checkbox"/> No			

RDL Requirements for Entry and Performing Work in a Facility
Los Alamos National Laboratory
Integrated Work Management
Effective Date: May 1, 2004

ES&H SITE HAZARDS & CONTROLS				
Site Hazards/ Concerns Identify site hazards and concerns that could potentially affect the worker(s).	Site Hazard Present	Facility Controls/Preventive Measures/Boundaries Specify controls for each site hazard	Supplemental Documents List permits, operating manuals, and other reference procedures	Special Training List training requirements
Elevated Work Surface Unprotected structures or work surfaces Elevated by more than 6 feet	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Environmental Impacts Potential disturbance of a watercourse or water discharge, air emissions, change to existing waste stream, or generation of hazardous waste. Specify Hazard: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No			
New construction projects; decontamination, decommissioning, or demolition; facility modifications, ground clearing, use of off-road vehicles, outside activities resulting in increased light or noise; change in outside footprint	<input type="checkbox"/> Yes <input type="checkbox"/> No			

Attachment B

A Crosscutting IWD shall not be implemented if the answer to any of these questions is “Yes”.

- ☐ Yes ☐ No The associated structure, system or component needs isolation and lockout/tagout at more than one energy source.
- ☐ Yes ☐ No The activity involves multiple hazards requiring possible conflicts and coordination of controls and personal protective equipment.
- ☐ Yes ☐ No Previous experience indicates a high probability of causing a known safety, health, or environmental event or near miss (reportable events, occurrences, over exposures, etc.).
- ☐ Yes ☐ No Work will be conducted on energized electrical circuits > 50 volts.
- ☐ Yes ☐ No The job requires support from multiple organizations or crafts (composite crews), the integration of skilled craft workers or support staff from other organizations, and can be considered complex due to the numbers of workers involved. The work also requires significant sequencing, coordination, integration, or verification of activities to complete the work.
- ☐ Yes ☐ No Approved special work permits are required to establish hazard controls for work related to, but not limited to: radiological areas, excavations, confined spaces, penetrations, dismantling systems, components, equipment or structures, and hoisting, rigging and lifting.
- ☐ Yes ☐ No There is the potential for rapidly changing worksite conditions related to environmental hazards, radiological contamination, chemical exposure, system configuration, energy sources, and other conditions such as temperature, pressure, water hammer, noise, and visibility.
- ☐ Yes ☐ No The work includes quality or safety affecting step actions that require hold points or independent verification sign-offs.
- ☐ Yes ☐ No The work activities require the application of new automated tools, methodologies, processes and other specialized equipment that are unfamiliar to the workers or supervisors.
- ☐ Yes ☐ No The workers have not received formal training to perform a unique, complex or first-time task. The complexity of the work exceeds the general skills, knowledge or abilities of the available personnel or craft

that will conduct the tasks, or the workers have not acquired the necessary training or qualifications to perform the activities safely.

- ☐ Yes ☐ No Detailed work instructions or procedures will enhance the safe work performance of the task, and can compensate for inadequate skills or experience of the workers involved.
- ☐ Yes ☐ No The work activities cannot be completed safely and effectively within two work shifts, requiring multiple personnel , shift turnover or resumption activities.
- ☐ Yes ☐ No The nature of the work complexity or hazards requires frequent or constant presence of a qualified PIC to ensure worksite safety.
- ☐ Yes ☐ No Replacement parts or materials used for the maintenance activity are not like-for like (fit, form, and function).
- ☐ Yes ☐ No The maintenance activity requires extensive disassembly and complex re-assembly, or system modifications are being performed.
- ☐ Yes ☐ No Respiratory protection or self-contained breathing apparatus is required to conduct the work.
- ☐ Yes ☐ No The work scope requires post-maintenance testing, return-to-service, or system restoration in excess of normal retest of functional tests.
- ☐ Yes ☐ No The work activities are related to or interface with the handling of reactive chemicals or high explosive materials.

Attachment C

Flow Diagram to determine if Cross Cutting IWD can be used.

